PHILADELPHIA MEDICAL TIMES.

SATURDAY, NOVEMBER 30, 1872.

ORIGINAL LECTURES.

CLINICAL LECTURES
ON PROLAPSE OF THE WOMB.

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LECTURE II.

WE pass now to the third form of prolapse of the womb,—that from (the so-called) *hypertrophic elongation of the supra-vaginal portion of the cervix.* But to understand it fully we must first furbish up our knowledge of the anatomy of the parts involved.

The womb is described as having a body, or corpus, and a neck, or cervix. The latter is divided into two unequal parts,—the glandular portion, which is comprised between the os externum and the os internum, and the non-glandular portion, or isthmus of the cervix, viz., that intermediate and contracted portion which unites the fusiform and glandular cavity of the neck to the triangular cavity of the body. The length of the healthy multiparous womb is about three inches. Of this the glandular portion of the cervix measures approximately one inch and a quarter, the isthmus one-half of an inch, and the body one inch and a quarter.

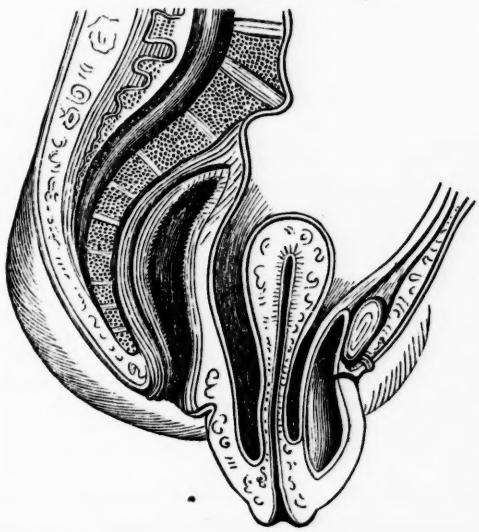
By the terminal fibres of the vagina, which gird it at the middle third of its glandular portion, the cervix uteri is still further divided into the infra-vaginal and the supra-vaginal portion. The free extremity corresponds to the infra-vaginal portion: about this there is no dispute. But the supra-vaginal portion of the cervix, as commonly described, is that portion of it which lies between the apparent vaginal insertion and the body of the womb. It therefore is made to include the upper third of the glandular portion of the cervix, and the whole of the non-glandular portion,—viz., the isthmus; and these two portions are generally believed to be the seat of the elongation. But this strikes me as an error, founded upon a misconception of the true extent of the supra-vaginal portion of the cervix.

Anatomically, this portion of the cervix is limited to the isthmus, and is therefore above the glandular portion. For, although the bulk of the vaginal fibres lie below the internal os, and the surface of attachment is to the eye a narrow one, yet in reality it is a broad one, covering two-thirds of the cervix, and reaching up to the os internum, where its fibres end.

Again, the base of the bladder rests upon the anterior wall of the vagina, to which it is fused by connective tissue, and it is also firmly attached to the anterior aspect of the cervix as far up as the os internum. These fibres of attachment are so closely blended with those of the vagina, that the supra-vesical portion of the cervix is practically the supra-vaginal portion, and each, therefore, lies above the os internum, and consequently above the glandular portion of the cervix. I beg you to bear these anatomical facts in mind, because on them hinge the arguments by which I hope to prove to you that the elongation found in this affection is not essentially hypertrophic; and that it is not the commonly accepted supra-vaginal portion of the cervix which is principally lengthened out, but rather the supra-glandular portion of the womb, that is to say, the isthmus and the lower portion of the corpus. But, until this has been proved to you, I shall adhere to the conventional name and attributes of this affection, although they assume it to be an hypertrophy, and its seat in the supra-vaginal cervix.

By studying this diagram it will be plain to you

FIG. 2.



that a wide difference subsists between a prolapse of the whole womb by descent, and a prolapse from an elongation of the supra-vaginal portion of the cervix. The term prolapse, as applied to this kind of elongation, as well as to that of the infra-vaginal portion, is a misnomer; because, although in both the cervix may protrude from the vulva, it does so more through elongation than from displacement. There is, in other words, a descent of the cervix,—a prolapse of the cervix, if you please, without necessarily any sinking down whatever of the fundus. Indeed, these two affections would seem to imply such a firmness in the suspensory ligaments as should, at first, keep the fundus from sagging down in the pelvis. This brings us at once upon debatable ground; but we will prudently keep neutral, and not display our colors until the "situation" has been studied out. But for that matter, to tell you the truth, I have hardly yet been able fully to make up my mind and range myself under any one banner. The question of hypertrophic elongation is to the gynæcologist what the late Schleswig-Holstein question was to European diplomatists. "I and another man," said Lord Palmerston, "were the only two persons in Europe who understood

this question. He is dead, and I—well, I have forgotten all I knew about it."

The woman who has just been brought in is greatly afflicted by the disease which we are discussing. In order to spare her feelings, and to give us ample facilities for studying the condition of her reproductive organs, I have had her completely etherized. She is forty-one years old, but hardship and over-work make her look much older. Her family consists of an invalid husband and six children, all of whom she supports by taking in washing. Five of her labors presented no difficulties; but the sixth, four years ago, proved tedious from the size of the child's head, and ended with the mishap of a torn perineum. She never afterwards felt strong; had lingering lochia, more or less leucorrhœa, "bearing-down feelings," and other uterine symptoms, which she attributed to her getting up and working too soon. Three years ago her urine began to scald her. The pain, at first bearable, daily grew worse, and soon became so acute that she now empties her bladder as seldom as possible. Not long after this, a tumor began slowly to protrude more and more from the vulva. It was and still is reducible, but its reduction, which at first gave her no pain, causes her so much suffering that she has dispensed with a perineal pad, long worn to keep it within the vagina. Her condition is truly a sad one: micturition and defecation are both difficult and painful; the former exceedingly so. The urine, no longer voided in a jet, dribbles over her person and excoriates it. She straddles when walking, complains bitterly of the constant dragging weight of the tumor, and now, in the prime of life, finds herself too crippled to work; while, to add to her afflictions, both she and her eldest daughter are confirmed epileptics.

This, in brief, is the history of the case; but it leads to no diagnosis more positive than a shrewd guess. Certainty can be gained only by a careful examination of the diseased parts. As I separate the thighs, you see protruding from the vulva this large boggy tumor, shaped like a truncated cone. Its apex is evidently occupied by the vaginal portion of the cervix, which is clubbed, snout-like, and apparently much hypertrophied, but not elongated. Upon a closer inspection, this condition of the cervix seems to be owing not so much to a hyperplasia of its parenchyma, as to a thickening of its mucous investment, to the gaping open of a lacerated os, to the turgid papillæ of the cervical canal, and to the exuberant growth of its submucous layer. There is an eversion of the lips, and a partial rolling out of the *arbor vitæ*. It constitutes, in fact, an imperfect attempt at an inversion of the glandular portion of the cervix, in which the loose mucous lining has participated to an extent greater than that of the more resisting parenchyma.

See this opening at the apex; it is not the external os, as you may think, but a portion of the canal much higher up. Here, about an inch from it, and describing an irregular margin around it, is the os externum. Let me prove this to you. I stroke down and pull together the jagged and widely divergent lips of the os externum, and now the cervix is somewhat elongated, reduced one-half in thickness, and made to look like a bishop's mitre. The vagina is wholly inverted; whilst partly upon it and partly upon the cervix are two large ulcers, one of them covered by a croupy exudation. These, I think, are attributable to friction from her clothing, to exposure to the air, and to the action of the dribbling urine.

Permit me to digress for a moment, in order to point out to you the difference in the behavior of true and false mucous membrane when exposed to atmospheric action. Under such circumstances, true mucous membrane—viz., that covered by conoidal epithelium—does not materially alter in structure. For instance: the lining membrane of the bladder in exstrophy; of the rectum in prolapse; of those air-tubes, the bronchia, does not become cuticular. Look at the folds and arborescent plicæ of this everted portion of the cervical canal; they are swollen and angry-looking, but not at all changed in structure. Contrast with them the squamous epithelium which lines the vagina and covers the vaginal portion of the cervix. It has become so derm-like as to resemble the pink skin of a new-born infant. There is here no sharp margin defining the limits of these two forms of mucous membrane, but the one shades into the other by transitional, or spheroidal, epithelium. It is this change of structure in the false mucous covering of the cervix that makes the dilating stage of labor so tedious in wombs that are or have been prolapsed. In such cases multiple incisions of the os have often been resorted to.

To determine whether the bladder is prolapsed, or whether it enters into the tumor as one of its constituents, I shall now pass in the uterine sound. As I expose the meatus, which is much sunken, a cluster of vascular growths comes into view. These are nothing more than hypertrophied mucous papillæ, and yet they are exquisitely sensitive. Their presence explains, in part, our patient's painful micturition; for, small as they are, from the irritation excited by friction and by the passage of the urine, they give intolerable anguish. These caruncles range in size from that of a millet-seed to that of a raspberry, but the suffering caused by them bears no relation whatever to the amount of growth they have attained. Mark the unusual course which the sound takes; it passes in almost vertically, with its concavity looking downward. I can feel its tip at a point half an inch from the apex of the tumor. You can now understand why, in passing her water, our patient experiences a difficulty apart from the pain caused by the presence of the vegetations. For, since a large portion of the bladder is outside of her body, the muscles of the abdomen can no longer compress it; and, further, the urethra is curved sharply around the sub-pubic ligament, and flattened against it. Clearly, then, the bladder is prolapsed, and its two walls, together with the utero-vesical fold of the peritoneum, and the inverted vagina, form the anterior half of the tumor. But what forms the posterior half? To ascertain this, I pass my index-finger into the rectum, and with my thumb push up the posterior wall of the inverted vagina. By this double touch I learn that a

small pouch of the anterior wall of the rectum (a rectocele) has been diverted into the protruded mass. This explains her difficulty in defecation. Again; you know that Douglas's pouch is so closely fused to the posterior *cul-de-sac* of the vagina that the descent of the latter necessarily involves that of the former. Hence we may unhesitatingly include this peritoneal fold among the constituents of the tumor.

(To be continued.)

ORIGINAL COMMUNICATIONS.

PRACTICAL HISTOLOGY IN VIENNA.

A COMMUNICATION TO THE BIOLOGICAL AND MICROSCOPICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

BY JAMES TYSON, M.D.

AT the request of the secretary, I have consented to give a verbal account of a recent brief experience in the laboratory of Prof. Stricker of Vienna, though conscious that I shall necessarily state some facts which are elementary, and familiar to many members of the section.

I am confident, in the first place, that those who are not familiar with the so-called "laboratories" abroad will be disappointed with the simplicity of their appointments in the majority of instances. Thus, the laboratory of Prof. Stricker consists of two moderate-sized apartments, one about thirty feet by fifteen feet, and the second half as large, with a still smaller private room, occupied by the Professor himself. In the largest room is a plain pine table, painted black, capable of accommodating eight or probably ten gentlemen with their microscopes. In the centre of this room, also, is a table like an ordinary dissecting-table, on which investigations are made upon animals, generally rabbits and dogs, secured in position by means of Czermak's "rabbit-holder." This consists of a rectangular piece of board perforated at the sides and one end by holes, through which cords can be conveniently passed. At the remaining end a semicircular piece is sawed out, producing a concavity which will conveniently receive the back of the neck of the animal, in the mouth of which is placed the well-known "bit" of Czermak, which effectually protects the experimenter from the bite of the animal. The perforated board and bit are adapted in size to that of the animal upon which the investigation is to be made, those used for large dogs being, of course, much larger than those used for rabbits. The animals experimented upon are generally curarized, the curare being kept in concentrated solution in glycerin, diluted for use, and introduced hypodermically. In this room is also a kymographion, protected by a covering of green baize, and made in the laboratory by one of Professor Stricker's "diener," who did it in something less than a year. In addition to these are closets along the wall, for chemicals, solutions, etc., microscopes and other apparatus when not in use. The smaller room contains a similar table for microscopic work, and is generally occupied by the assistants, while the pupils work at the table in the larger room.

From this description, which may be considered as applicable to a number of laboratories which I visited, it will be seen that the word *laboratory* is properly used to indicate a work-room, or place to work in, quite consistently with the etymological and primitive meaning of the term. The supply of material appeared to be abundant, as to frogs and smaller animals; but I have known as much as ten florins (about five do lars, and really equivalent to ten dollars with us) to be paid for a large dog.

Quite an institution in the laboratory are the two "diener," or servants, one of whom is a good mechanic and makes much of the apparatus used in the laboratory; but the deliberation with which he does it is something remarkable, especially to Americans. I am sorry to be able to say nothing more favorable of "Louis," the second "diener," than that he is an adept at fastening dogs, and at omitting to do anything which may be requested of him.

Although furnished with accurate information as to the situation of the Pathological Institute, I wandered for some time among the various quadrangles and courts of the great General Hospital before I succeeded in finding the laboratory. My knock at the door was answered by a lusty "*Herein.*" Entering, I found several gentlemen in shirt-sleeves working over microscopes, one of whom responded, in very good English, to my inquiry for Prof. Stricker, to the effect that he was the person. I found him much younger, and very much less a "bear," than I had expected; apparently less than forty years of age, of medium stature, wearing no whiskers, except a moderate mustache, and dressing neatly. He treated me most courteously, and, on learning the object of my visit, very promptly effected an arrangement by which I was to work a certain number of hours daily with one of his assistants, Dr. Spina.

The microscopes used in the laboratory, and in Vienna generally, are Hartnack's, also Hartnack's lenses; and I saw no others there. The highest power used was an immersion No. 10; but this was frequently called into requisition. The great size and the reputed conveniences of our own and the English stands are not at all appreciated, and the beautiful stand of one of our best American makers, brought to Vienna by an American surgeon, was a source of considerable merriment to those who saw it, who regarded it as a sort of machine. The microscope is altogether used in the vertical position; and the precaution so much insisted upon among us, of keeping the unemployed eye open, was considered, at least by those who taught me, absurd advice, and by many had never been heard of. It may be added that the microscopes used by the assistants and students are the property of the Pathological Institute.

Having finished the subjects of blood and epithelium in the laboratory of the Brown Institution in London under the direction of Klein, we passed directly to the study of

CONNECTIVE TISSUE.—For this purpose a small portion of the mesentery of a living frog is placed upon a slide in a drop of serum or one-half per cent.

solution of chloride of sodium, and covered with a thin glass cover. Five forms of cells are met with in connective tissue.

1. The *wandering cell*, exhibiting its peculiar amœboid movement resulting in a change of shape, to which is added, also, a change of position. This connective-tissue corpuscle assumes a permanently round form on the addition of water, when it may be said to be dead. These, in some instances at least, are probably white blood-corpuscles which have migrated through the walls of blood-vessels into the connective tissue.

2. The well-known, coarsely granulated (grob-granulirt) *spindle-shaped* connective-tissue corpuscle, provided with an elliptical nucleus.

3. The *round, finely granulated* (fein-granulirt) connective-tissue cell, which exhibits no movement, or at least a very slow one, and differs only from the dead amœboid cell in its larger size. These generally have an oval nucleus, or, according to Rollett, their contents may appear to be accumulated at one point around a body resembling a nucleus; according to this observer, also, they give off radiated prolongations which often join. Between the spindle cell and the round cell are intermediate shapes.

The same study may be made in the connective tissue derived from the fresh muscle of the thigh or leg of the frog or rabbit; but the cells are less numerous.

4. In the connective tissue of the muscles of mammals, *cylindrical* (walzenförmig) cells are sometimes found, containing an elliptical nucleus.

5. Finally, *pigment-cells* are also found in connective tissue, abundantly in amphibia and fishes, but to a limited degree only in man (iris, choroid, and innermost layers of the sclerotic). These are usually provided with a central nucleus, often obscured, and also exhibit movements, which are, however, exceedingly slow in adult batrachians, but more rapid in their embryos.

Rollett, in Stricker's Histology (New Syd. Soc. translation, p. 57), describes other finely granular cells "which are for the most part more delicate and pale, and frequently exhibit fine radiating strongly refracted striæ of greenish tint. These easily overlooked, delicate, and proportionately large structures may be best distinguished by their very distinct, large, vesicular nuclei." I have had no opportunity of recognizing these cells as special forms.

The addition of very dilute acetic acid, so dilute as to be just appreciably sour to the taste, causes an increased granular appearance in these cells. A stronger solution, say .20, causes a more distinct exhibition of the nuclei, which in the case of the migratory cells are round and smaller, and frequently exceed one in number, while the nuclei of the other connective-tissue cells are *oval* in form and larger in size. The addition of still stronger acetic acid produces shrivelling in the cells, a formation of folds, and extrusion of the nucleus in the case of the wandering cells.

One or more of these cells are met in *two principal varieties* of connective tissue: 1. Trabecular tissue (Balkennetz), adenoid tissue of His, embryonal tissue. 2. Fibrillar connective tissue.

1. The *trabecular connective* tissues are generally characterized by the fact that they do not yield gelatine on boiling. They form net-works of which the trabeculæ were primarily produced by the union of radiating processes of cells. These may preserve their cellular character in retaining the nuclei of the cells, producing thus a nuclear trabecular tissue, or the trabeculæ may so acquire a fibrous constitution as to be undistinguishable from bundles of the fibrillar variety of connective tissue. This variety of connective tissue may occur in independent masses, as in the so-called mucous tissue of the umbilical cord, or it may serve as a means of support, or investment of protection, for fibrillar connective tissue, or vascular (capillary) tissue, or organs, as in the lymph-glands and similar structures, Peyerian and solitary glands, the mucous membrane of the intestines, tonsils and follicles of the tongue, the conjunctiva and its trachoma glands, and the nasal portion of the pharynx. In these latter instances the meshes are filled with the peculiar lymphoid (amœboid) cells described. They are also traversed by blood-vessels, and unite also upon the external surface of the blood-vessels to form the tunica adventitia capillaris of His.

It is this tissue which constitutes the neuroglia of Virchow, the delicate supporting connective tissue of the eye and nervous centres. It also occurs as a constituent of certain pathological new formations. This form of connective tissue is best demonstrated, according to the method of His, by carefully brushing thin sections of the hardened tissue with a camel's-hair brush, by means of which the lymphoid cells are removed, and a delicate net-work is left behind, composed of trabeculæ enclosing round or polygonal spaces: these trabeculæ are sometimes distinctly seen to be composed of nucleated cells or to exhibit nuclei, or, in consequence of age, to have lost all cellular characters.

2. *Fibrillar Connective Tissue.*—Between the trabecular connective tissue or "Balkennetz" and the fibrillar form are intermediate forms; but the great bulk of the connective tissue of the higher animals, at least, is made up of the fibrillar variety.

This—to which alone the term connective tissue was formerly applied—is transformed into gelatine on boiling, and is characterized by the well-known fibrous structure implied in the term fibrillar. The cellular elements are those already described, and can only be satisfactorily studied in the young formation of this tissue when quite fresh.

The toughness or close adhesion of many forms of this connective tissue, as in the cornea, sclerotica, tendons, fascia, and even subcutaneous tissue, is well known. It is often so great as to make it impossible to isolate the fibrillæ composing it, without the use of reagents. One of the best of these is *simple lime-water*. A piece of sclerotica or subcutaneous tissue, for example, is thrown into lime-water and allowed to remain for twenty-four hours. At the end of this time a small piece is taken out and frayed with needles. If it stubbornly resists the dissection, it is replaced in the lime-water for

another twenty-four hours, when the dissection is repeated. If necessary, the maceration may be continued even longer, when the dissection may be made with surprising facility, and beautiful preparations may be made in which the separate fibrillæ may be clearly displayed. The sclerotic and cornea of the rabbit and the subcutaneous connective tissue from the dog—which is very tough and difficult to fray out—were thus successfully manipulated.

A similar agent is baryta-water, acting more promptly than lime-water and accomplishing the same results in from four to six hours.

A third reagent, which acts similarly, though not so rapidly as the lime-water, is a solution of *bichromate of potash*, of a dark straw-yellow color. The maceration may be continued two or three days, according to the firmness of the tissue, and the solution should be renewed. The fibrillæ are thus rendered easily isolable. The use of this solution is attended by a yellow coloration of the fibrillæ, which may or may not be desirable. This solution was used successfully in the treatment of the adventitia of blood-vessels and in the case of tendons.

The rationale of these processes is not precisely known; though it is usually said that the lime-water and bichromate of potash dissolve a species of cement (Kittsubstanz) by which the fibrillæ are believed to be held together.

Very interesting are the effects of acetic acid and boiling water upon the fibrillar connective tissue. Acetic acid of almost any strength beyond .20, it is well known, removes completely the fibrillar appearance of this form of tissue, rendering it homogeneous, and increasing the width of the bundles, while the cellular element and the cord-like fibres of yellow elastic tissue are rendered more distinctly visible. On the other hand, the addition of a little weak solution of ammonia promptly restores the structural characters.

Again, a piece of subcutaneous connective tissue was boiled in water in a test-tube for five or ten minutes. There resulted the same absence of fibrillar appearance, with increased width of the bundles, and constrictions at certain points where the spirally *surrounding* fibrillæ still remain, not permitting the swelling to take place in these situations. Longer boiling dissolves or causes the disappearance of these surrounding fibres also, and if continued still longer causes a solution of the entire mass into gelatine. Tendon was also similarly treated, and with the same results. For these purposes the hot-water stage of Stricker may be used to great advantage.

The staining of connective tissue was attained by two principal staining solutions, *carmine* and *chloride of gold.*

Carmine staining was accomplished by making an ammoniacal solution of carmine, without particular regard to strength, and diluting by water. The tissue was placed in a small quantity of this, and examined from time to time, to determine the degree of staining. When the proper time of immersion for a given fragment was determined, others of the same kind and size were immersed for a corresponding period. In all instances an intensity or vividness was secured by further treating the stained tissue by a very weak solution of acetic acid, of a strength just sufficient to allow the acid to be tasted. This staining is not restricted to any one element of the tissue, but is general, the cells being more deeply tinted than the fibrillæ.

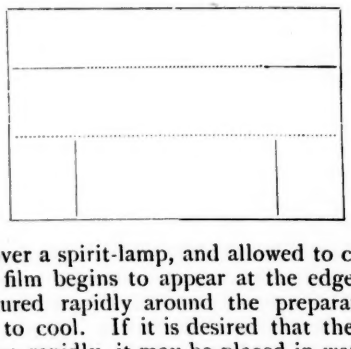
Staining connective tissue with *chloride of gold* has for its object more particularly the demonstration of the cells of the connective tissue, and was thus practised in the case of delicate connective tissue. A piece of the mesentery of a frog is carefully cut out and stretched by means of pins over a fenestra cut in cork. Thus prepared, it is placed in a one-half per cent. solution of chloride of gold for ten minutes, after which it is removed to distilled water slightly acidulated by acetic acid, where it is allowed to remain twenty-four hours, in order that the gold may be reduced and the cells stained. The preparation when taken from the acid should be of a uniformly violet color; it will also be somewhat hardened. It is then examined in glycerin. The different forms of connective-tissue corpuscles should be noted, and care should be taken not to mistake for them the nuclei of clumps of the red corpuscles of the frog, which are apt to be encountered in consequence of section of a blood-vessel.

The period of immersion cannot be positively stated: experiment must determine the exact time. Ten minutes is perhaps an average: larger preparations require longer, the more delicate a shorter time.

So far, however, as my own limited experience went, I am not disposed to attribute much utility to the gold staining of connective tissue. The cells only are stained, and that somewhat faintly, and the preparations cannot be mounted to keep any length of time, while the vividness and permanence of carmine stainings, when mounted in glycerin or slightly acid glycerin, are well known.

Making Sections of Tendon and other Tissues.—The imbedding process was always employed; the substance made use of for the purpose being white wax reduced in consistency by oil, the two being melted together. The consistency to be obtained is one approaching that of the tissue to be cut after hardening, while the quantities employed to attain it must be influenced by temperature, the season of the year, etc. The preparation is always previously hardened in alcohol or chromic acid, and in the case of tendon it is sometimes dried, when indeed it may be cut without imbedding, though the change undergone by a specimen thus treated is manifestly great. The process employed is very simple. A little box is made of moderately stiff white paper, and adapted in size to the preparation to be cut. The box is made in the following simple manner. A rectangular piece of paper is folded as indicated by the dotted lines and cut as shown by the plain lines in the diagram; this permits the corners to be turned up and about each other, so that, being pasted in this position, a neat box is formed. The preparation is then taken from the fluid in which it was immersed (the excess being allowed to evaporate, or removed by bibulous paper), and perforated towards one end by a pin, which is then thrust into the floor of the box in such a way that the preparation occupies a central

position, so that the molten matter may readily flow around it. The mixture of wax and oil is then



melted over a spirit-lamp, and allowed to cool until a slight film begins to appear at the edges. It is then poured rapidly around the preparation and allowed to cool. If it is desired that the cooling take place rapidly, it may be placed in water; but, if possible, it should be allowed to cool gradually. After the mass is cool, the paper is stripped off. We then have a rectangular prism, of convenient size to hold between the fingers. This is cut with an ordinary knife until the preparation is reached, when sections are made with a broad, flat knife mounted like a razor, which is much used in Vienna, the imbedded tissue wrapped in a towel being held in one hand and the knife in the other. No precise directions can be given as to the mode of making the sections: experience alone can teach this. It must not be omitted, however, that the knife and upper surface of the preparation should be wetted in each case with alcohol or water, according to the previous immersion. So also the section is floated off the knife in alcohol or water, according to its previous treatment. It may likewise be stated that it is not necessary to cut entirely through the imbedding substance, but that it is better to start the knife just beyond the edge of the specimen to be cut.

After the sections are made, they may be stained in chloride of gold or carmine or other staining fluid, in the manner described. Or if the tendon is a delicate one, as certain almost thread-like tendons of the frog, it may be stained before the sections are made.

(To be continued.)

ON THE EFFECTS OF THE BROMIDES IN EPILEPSY, WITH SPECIAL REFERENCE TO THE BROMIDE OF POTASSIUM.

BY M. GONZALES ECHEVERRIA, M.D.,

Resident Physician to the New York City Asylum for the Insane, Ward's Island, N.Y.; Consulting Physician to the New York Hospital for Epileptics and Paralytics, etc. etc.

(Continued from page 118.)

I HAVE observed the eruption of the skin in one hundred and twenty-one males and one hundred and sixty-two females. It displays itself in scattered pustules, and in some instances as a rash or diffuse elevation of the skin, over the chest and limbs, this being particularly noticeable in females and children. I have met with the bromide eruption at all seasons of the year; though Vòisin says that it only occurs in winter. In twenty-eight males and in thirty-four females of the above cases, the eruption was of a very slight character, thus modified by the use of arsenic, which had not been employed in the other instances. I have seen the eruption crop out twenty-four hours after the giving of the bromide, but it usually appears from three to seven days after, and is ordinarily painless. It seems as though females and children were more liable to the eruption than adult males. In many instances there is instead of the pustules, and without any previous reddening or swelling, a peculiar discoloration of the skin, a brownish hue, more conspicuous on the forehead or neck; but, as just said, the eruption is oftener of a papular nature, breaking out first in the face, chest, and back, and very much resembling acne. The papulæ may break out again in a confluent form in the elbows, dorsal region of the hands, knees, or lower limbs, determining an extensive and painful subcutaneous suppuration, as I have observed in three males and five females. This complication ceases on the discontinuance of the bromide. The most extensive cutaneous eruption I have met with was in two females: one had an ulceration over the whole posterior face of the right forearm, and the other over the right knee; in both instances the eruption was painful, but subsided rapidly on suspending the bromide. The scar left by the pustule has a bluish, smooth aspect, or is sometimes of a dark-brown color. It is not permanent, though the scar of confluent pustules may persist for several months. I have never noticed the same portion of the skin to be twice affected by confluent pustules. In two males there was inflammation, or rather a painless swelling, of the parotid and maxillary glands, along with large furuncles in the same region. In another male, a large eczematous eruption, which lasted only a few days, broke out in the left side of the face and left forearm. These three last patients were epileptic insane.

I do not think that the existence of the eruption bears any relation to the effects of the bromide on epilepsy. Its occurrence is far from constant, whereas many epileptics I have attended have been relieved of their attacks, and indeed so far cured, without having ever exhibited any eruption; whilst this latter has been present in its worst form in epileptics who have remained unbenefited by the bromide. I have already referred to the association of the arseniate of potash with the bromide to avoid the occurrence of the bromide eruption. We, however, fall short of this result when arsenic has not been employed from the beginning, or if the eruption be not previously arrested on a discontinuance of the bromide, or if alkaline baths are not administered along with the two salts, in cases where the predisposition to cutaneous trouble is manifest in any high or persistent degree.

I look upon anæsthesia of the skin and mucous membranes as one of the most constant effects of the bromide of potassium. I find anæsthesia of the skin distinctly recorded in 216 cases: 86 males, 130 females. The phenomenon was general among 50 of the first and 78 of the latter, loss of sensibility being more evident in the lower limbs in the remaining cases, thus accounting for the totter-

ing gait then observed. I am satisfied that the ataxic symptoms attending the administration of large doses of bromide of potassium are mainly due to the loss of tactile sensibility. This latter has appeared to be more or less impaired in every one of the cases, but not the perception of heat, for such epileptics have at once objected to and complained of any hot application to their skin, no less alive to painful impressions. Nevertheless, in 23 males and 42 females the perception of temperature was unmistakably lost, and in three males there was, besides, complete analgesia superinduced by the bromide of potassium. One of these epileptics, admitted into this asylum in the last stage of dementia, had been taking for five weeks half an ounce of the anti-epileptic mixture, containing thirty grains of bromide of potassium, three times a day. The frequency and severity of the fits had decreased, and he became less stupid, when one morning he unconsciously and most severely burned his toes by keeping his feet over the steam-pipe of the radiator in the ward, until he was discovered and removed therefrom by one of the attendants. Furthermore, I have remarked that the insertion of a seton, or cauterization with a red-hot iron, in the back of the neck, has caused very little pain to epileptics under a regular course of treatment with the bromide, and who in the beginning were very sensitive to such operations.

Reflex reactions are lessened under the influence of the bromide. The tactile sensibility of the pharynx has been lost and deglutition impeded in every case of complete bromism, all liquids passing then through the nose or into the larynx. This, however, I repeat, has been an accident of bromism, whereas deglutition has continued unimpeded in every instance until the extreme physiological effects of the salt have been induced. The sensibility of the pharynx is, indeed, blunted or considerably diminished by the bromide, and more so in the case of children. A curious illustration of this fact was exhibited by a girl, ten years old, who had become epileptic after scarlatina, and who, while taking ninety grains of bromide daily, had a fish-bone imbedded in the right pillar of the fauces, no distress following for four days, at which time the parents became alarmed at the fetidity of her breath and salivation, which disappeared upon the removal of the fish-bone from the palate. One circumstance which deceives us very materially on examining the state of anæsthesia of the pharynx, in reference to the effects of the bromide of potassium thereon, is, whether the patient watches or not the application of the instrument or object employed to test the pharynx's feeling. Laborde has pointed out this cause of error, and I may add that the same thing operates no less actively when we inquire generally into the sensibility of the skin, for there was not one case where tactile perception did not become more acute after the patient had seen the instrument employed to ascertain his degree of sensibility.

Loss of taste has been frequently complained of in the beginning of the use of the bromide, but has not persisted, to my knowledge, in any case. A male epileptic, subject to fits attended with furious mania, was directed, upon admission into the asylum, to take thirty grains of bromide of potassium three times a day; thereupon he lost all sense of taste, and became very much distressed. He could not distinguish the taste of tobacco or salt from pepper, and his food, when chewed, conveyed to him the sensation of cotton, being entirely tasteless. Deglutition continued unimpaired, as did also the feeling of temperature, and his breath did not become foul. Tactile sensibility of the tongue and throat did not appear materially affected; titillation of the uvula would make him gag, until the taste gradually returned in the course of six days.

The sense of smell may become equally affected by the bromide of potassium, not from the hypersecretion from the Schneiderian membrane, but from the diminished sensibility of the nerve. I have observed such substances as tobacco, snuff, ammonia, etc. to excite no sneezing, and in the epileptic just cited the sense of smell also disappeared, to return long after the recovery of taste. Seven males and eleven females exhibited loss of smell upon the use of the bromide of potassium. It is not uncommon to remark in inveterate epileptics an injection of the conjunctiva, a real conjunctivitis with thick discharge from the palpebral glands, similar to that frequently accompanying other forms of insanity or noticed where the unsoundness of mind has a larvated and undefined character. The bromide of potassium may originate, not seldom, a similar congestion of the conjunctiva, with muco-purulent discharge from the eyelids, the eye becoming very red and sensitive to light. This effect is more particularly met with among epileptics in a state of general paralysis, or melancholia, as well as among those subject to frequent meningitic congestion, in all of whom the bromide may arrest the repetition of fits, but seems to be without any beneficial influence over the progressive mental derangement.

Of the rarer phenomena attending the use of the bromide of potassium in epilepsy, I may say that diarrhœa has been recorded in five of the epileptics here considered, three adult females and two male children. The phenomenon did not persist, and passed away after a few weeks, without any special treatment. In one female the salt in drachm doses would induce nausea and vomiting, and in an epileptic soldier, at the United States Central Park Hospital, fifteen or twenty grains of bromide of potassium would always produce vomiting. He had become epileptic from the effects of a gunshot wound of the skull. Another male epileptic, insane, while under treatment, was twice seized with icterus, without any positive indication, however, that it was caused by the bromide. He died afterwards from meningitis, and two large biliary calculi were found in the gall-bladder.

Fourteen epileptics—five males and nine females—complained of diplopia while under the use of the bromide, but among a larger number there was permanent strabismus wherever the full physiological effects of the bromide were induced. I have examined with the ophthalmoscope, on different occasions, the retina of epileptics in a state of bro-

mism, and I have so far been able to make out a pretty uniform change in most of the cases. In two females there was a brighter redness and pulsation of the veins upon the disk, which was not noticed before or after the supervention of bromism. A hazy condition of the disk is recorded in five cases,—three males and two females; whereas the memoranda of thirty-eight more cases—eleven males and twenty-seven females—show that the retina was in a state of congestion with an increased reddish tint of the disk, continuing along with the bromism and for one or two days after. These observations agree with those of Nicol and Mossop, who have concluded, from their experiments on the action of certain neurotics on the cerebral circulation, that bromide of potassium produces congestion of the brain (*British and Foreign Medico-Chirurgical Review*, July, 1872). I cannot, consequently, assent to Laborde's statement,—that no alteration takes place in the optic nerve of bromized individuals (*Archives de Physiologie*, May, 1868).

Irritability of temper has frequently attended the administration of the bromide of potassium, as a transient phenomenon in the first few days. In some instances of epilepsy without insanity, the bromide has superinduced mania. In one female, as low a dose as ten grains of the bromide would set her wild, with hallucinations of hearing, and suicidal mania: she afterwards could take, however, twenty grains of the salt associated with narcotics, thrice daily, favorably and without the above symptoms. Any larger quantity than thirty grains would also produce suicidal mania in two other females. Another female, again, would become maniacal on twenty grains of bromide repeatedly taken, while two of her companions were rendered, by the same amount, one melancholic, with delusions of hearing, and the other melancholic and drowsy. Among males, homicidal mania has occurred three times, eight have become melancholic, and several others have shown hallucinations of sight or hearing, upon exhibition of large doses—from thirty to forty grains—of bromide of potassium. One young man, subject to nocturnal attacks, has remained entirely free from them and from the mental excitement that they occasioned, as long as he took one drachm of bromide of potassium daily; he nevertheless was all the time melancholic, and ceased to be so on stopping the bromide, when the nocturnal attacks again recurred. I have noticed in two male and three female epileptics, not insane, under the continued daily use of from sixty to ninety grains of bromide of potassium, that without premonitory mental or physical derangement, they became amnesic. Two of the females, particularly, were quite aphasic, and not only did they forget certain words, but they also became unable to utter certain others. None of these epileptics had aphasia in relation to their fits; nay, these were checked when the aphasia was exhibited. The discontinuance of the bromide was directly followed by that of the aphasia, which returned again when treatment was resumed. Voisin mentions a similar instance of aphasia in a male epileptic subject to the continued influence of the bromide, and Professor Clarke, of Harvard University, in his recent valuable monograph on the bromide of potassium, reports the case of a lady, suffering from chronic ovarian disease, to whom he gave a continued daily dose of forty grains of bromide of potassium. After she had taken it for two weeks, she began to exchange two words for each other; and the peculiarity disappeared shortly after she discontinued the use of the bromide.

I have little to add to describe the peculiar phenomena of bromism. They are: congestion with swelling of the fauces and of the tongue, redness of the conjunctivæ, cheeks, and nose, dilatation of the pupils, congestion of the retina, dimness of sight, diplopia, thickness of speech, slowness of the pulse and respiration, decreased temperature of the skin, increased secretion of the salivary glands and kidneys; in some instances hallucinations of sight or hearing, and mania or melancholia, have shown themselves, the former of a suicidal nature. Deafness may occur in some cases, upon the swelling of the fauces extending to the Eustachian tube, but it readily disappears on discontinuance of the bromide. The anæsthesia of the skin and mucous membranes becomes very conspicuous, as also a tottering gait, with inability for steady exertion of any kind (writing, buttoning up the clothes, etc.), and, above all, an overwhelming drowsiness. I have further observed, in six males and nine females, a loss of power over the sphincters, with an unconscious passage of urine and excrement; two of the males, and four of the females, were children. The appetite to eat, and to smoke or chew tobacco, has never been completely lost, even while the patients were under large doses of bromide of potassium.

I cannot say that bromide of potassium has been observed to exert any special uniform effect on the derangement of menstruation attending epilepsy with the females under my care.

(To be concluded.)

A NEW MODE OF WRITING PRESCRIPTIONS.—The *Clinic* contains an article from M. J. P. Bonsieur, proposing what he calls the "one-dose prescription plan;" namely, that the physician should simply put down on paper the dose to be given, thus:

℞ Ferri redacti, gr. j,
Quin. sulph., gr. ss,
Ext. gentianæ, gr. j. } × 12.

The apothecary will from this make up, of course, twelve doses of the prescribed quantities of each drug, in pill, powder, syrup, or whatever form the physician may write below. M. Bonsieur seems to think the menstruum might be left altogether to the apothecary; but it would be far better for the prescriber to indicate this.

The plan presents some great advantages, as, for example, in economy, but does not give any more security than the one now generally followed, since an absent-minded physician would be just as apt to write "Morph. sulph. gr. x" in place of "gr. $\frac{1}{10}$," as to write "℈j" in place of "gr. j." Constant care and attention to the matter in hand, adequate knowledge being of course presupposed, can alone prevent dangerous mistakes either in the writing of prescriptions or in the compounding of the drugs called for.

PHILADELPHIA
MEDICAL TIMES.
A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

PUBLISHED EVERY SATURDAY BY
J. B. LIPPINCOTT & CO.,
715 and 717 Market St., Philadelphia, and 25 Bond St., New York.

SATURDAY, NOVEMBER 30, 1872.

EDITORIAL.

PROF. TYNDALL'S LECTURES.

THE medical as well as the general public have looked forward with much eagerness, ever since the first announcement of Prof. Tyndall's intention to visit this country, to the pleasure and instruction to be derived from his lectures. They have not been disappointed. His course here has been brilliantly successful, the hall having been crowded each evening with an appreciative and intelligent audience, who frequently applauded, as well they might, his admirable expositions of scientific matters.

His lectures remind us strongly of the works from his pen, which have made his name so familiar to the reading world on this side of the Atlantic. Clear and forcible in language, they are illustrated by striking and carefully elaborated experiments, which add tenfold to their interest. We may say, further, that Prof. Tyndall has made a not less agreeable impression upon those who have met him socially than upon those who have heard him in public. His visit to this city will long be remembered with pleasure.

DR. COHEN'S MÜTTER LECTURES.

THESE lectures are now in process of delivery, on Tuesday and Thursday evenings of each week, at the hall of the College of Physicians, and are well attended. Dr. Cohen has taken for his subject the surgery of the nares, larynx, and trachea, to which he has for a number of years devoted himself, and with which his summer lectures at the Jefferson Medical College, and the work he has recently published, have already demonstrated his familiarity. It is by courses of this kind that the legitimate objects of such bequests as that of Dr. Mütter will be most fully accomplished; and we trust the profession in this city will not be slow to manifest their appreciation of the opportunities thus afforded them.

ANOTHER NEW JOURNAL.

WITH the opening of the new year, a fresh enterprise will be undertaken by Messrs. Lippincott & Co., in the shape of a monthly journal, to be called the "Archives of Scientific and Practical Medicine." It is to be under the editorship of Dr. Brown-Séquard and Dr. E. C. Seguin,—names which carry an assurance of brilliant ability, and which will, we think, bespeak the favor and support of the profession not only in this country but abroad.

Each number will consist of about one hundred closely-printed octavo pages, mainly made up of original communications; the details of the plan, price of subscription, etc., will be found in our advertising columns.

LEADING ARTICLES.

ON THE TEACHINGS OF DR. J. MARION SIMS REGARDING THE CAUSE AND TREATMENT OF STERILITY.

BY DR. VON SCANZONI.

(Beiträge z. Geburtskunde u. Gynaekologie. Scanzoni, vol. vii. p. 109.)

THE fundamental idea of the modern surgical treatment of sterility by operations designed either to dilate or to straighten out the cervical canal, is that there always exists a mechanical obstacle to the entrance of the spermatozoon. Scanzoni earnestly protests against the acceptance of a theory based on careless observation of phenomena, and which necessitates the frequent performance of an operation which is in itself dangerous, and in some cases fatal. Opposed to the new school of gynæcologists, who regard the publication of Dr. Marion Sims's book on uterine surgery as the dawning of a new era in this hitherto neglected branch, he maintains that the want of careful histories of cases, and a certain or rather an *un*certain looseness of expression with regard to actual results, so decidedly deprive it of scientific value that its review becomes a difficult and arduous task. So far from regarding a mechanical obstacle to the entrance of the seminal fluid into the uterus as the sole cause of

sterility, he brings forward and urges the importance of the following morbid conditions, which may be, and often are, the causes which prevent conception,—viz., any functional disease of the ovary or testicle, which results in the production of a vitiated ovum or spermatozoon, or the occurrence of any one of the numerous pathological conditions which may prevent the exit of the ovum from the ovary, its reception by the Fallopian tube, and its passage into the uterus. We are, for the most part, utterly unable to diagnose the existence of any of the abnormal states which would produce such a result; and yet the possibility of conception depends on the physiological and harmonious sequence in the functional activity of these organs.

In order to prove that conception may occur in spite of the most extreme displacement, several cases are given in detail, where the introduction of the sound was rendered absolutely impossible, owing to the marked flexions of the uterus, or, as was the case in one instance, to the existence of an inguinal hernia of that organ; and yet, in all the histories given, conception repeatedly took place. While Scanzoni admits the general truth of Marion Sims's statement that the pain of dysmenorrhœa depends on a mechanical obstacle to the passage of blood from the cavity of the uterus, he still maintains that *all* cases cannot be explained in this way, and states that some of the most severe cases of uterine colic he has ever seen occurred before one drop of hemorrhage had taken place in the uterus, as he has repeatedly proved by the introduction of a sound, while the pain sometimes continued after the flow had been freely established, but not sufficiently so to take away the pressure from the over-excited nerves. So too the most intense uterine colic may be excited by the application of leeches to the cervix, even in cases where care has been taken to guard against the passage of one of them into the uterus,—an accident which some authors have availed themselves of to explain the severity of the pain.

Scanzoni then goes on to show in detail that in many cases it is simply impossible to diagnose, either by the fingers, sound, speculum, or by the aid of the sponge tent, such a contraction of the cervical canal as to justify us in regarding sterility as its *necessary* consequence, whether this contraction be due to a congenital or an acquired constriction of the os externum; the infiltration and swelling of the mucous membrane following a chropic catarrh of the organ, and a consequent development of the folds of the arbor vitæ; the presence of enlarged follicles with broad bases of attachment (the ovula Nabothi); new formations grouped together under the head of mucous polypi, which for the most part originate in these same follicles; more or less extensive fungous excrescences caused by papillary growths; spastic contraction of the os internum; the various and often-occurring forms of flexion; diffuse hyperplastic growths affecting either the entire cervix or only certain portions of it; myomatous and fibroid tumors having their seat either in or near the cervix; or to intra-mural or pedunculated growths attached to the body of the organ. In all of these conditions neither the sound nor our other aids to diagnosis enable us to exclude pregnancy, as the histories of numerous cases given by Scanzoni show.

The author deplores the incompleteness of the statistical tables in Sims's book. It is true that it is stated that the operation for the Bilateral Incision has been performed five hundred times, but in only six of these cases is it stated that the wished-for result was attained, viz., that the woman conceived. Four other cases in which conception followed the amputation of the cervix must be added to these. While Scanzoni does not doubt that Sims has other more extended statistical statements which place the operation in a more favorable light, still he says that these are the results from which we are asked to accept the operation. These ten cases are carefully analyzed and reviewed by Scanzoni, who finds that seven of the women had been pregnant before the operation,—in other words, that we have to do here with cases of *acquired* sterility, in which the prognosis is unquestionably more favorable. The fact that the operation is not without danger is then insisted upon by Scanzoni, and the members of the profession are exhorted to review calmly the evidence on which this operation rests,—the value of which cannot be denied in a few well-selected cases,—before they follow blindly the so-called new school of uterine surgery.

CORRESPONDENCE.

ANÆSTHESIA—DR. HORACE WELLS.

To the Editor of the Philadelphia Medical Times:

In a recent number of the *Times*, mention was made of a project for raising a Testimonial Fund for the benefit of the family of the late Dr. Horace Wells, and now the circular for that purpose, signed, I am surprised to see, by several of the most eminent medical men of this city, is lying before me. If, as individuals, they are desirous of testifying in this manner their approval of Dr. Wells's endeavors to discover the means of anæsthesia, nobody could reasonably object to the pro-

ceeding. If, however, this movement springs from the belief that he did actually make the discovery, then it becomes a fair subject of criticism. On this point we are left in no doubt. In the circular it is said, he was "a benefactor to the world;" "that he conferred upon it the greatest physical boon ever yet bestowed by man upon his fellows;" that he was the means of saving "tens of thousands of lives, as well as an untold amount of mental and physical anguish." Not so have we read the history of this matter, and, in the face of well-established facts, such representations can excite only a feeling of surprise and wonder.

The historical record is remarkably clear and explicit. It gives no uncertain meaning. In the autumn of 1846, several surgical operations were performed in the Massachusetts General Hospital, in Boston, without causing pain, under the influence of sulphuric ether, and thus were demonstrated, beyond a reasonable doubt, the practicability and complete success of this method of producing anæsthesia for such a purpose. From that time this great achievement became, not a matter of guessing, or of speculative belief, but a fixed fact, a veritable reality. During the twenty-five years or more that have since elapsed, the great majority of the profession, as well as the unprofessional public, have believed, even from the first, that the honor of conferring this signal blessing on mankind is due, wholly or partly, to either Dr. Jackson or Dr. Morton. Why, then, are we asked, at this late day, to reverse this judgment, and bestow the honor on one who failed to realize the idea which he and others had entertained, of preventing pain in severe surgical operations by some thoroughly reliable means? Dr. Wells ascertained, as Sir Humphry Davy had before him, that the inhalation of nitrous oxide renders a person insensible to pain under a slight surgical operation. That was the whole extent of his achievement. How far short it is of the end proposed and actually reached by the Boston gentlemen, would seem to be obvious enough without any danger of mistake. Had the art of producing anæsthesia been left just where Dr. Wells left it when they came upon the scene, nobody can suppose that we should now be performing severe operations without pain. And yet we know even better than he what nitrous oxide can do and what it cannot do in regard to anæsthesia. And now we are asked to award to him the honor of a discovery which required another discovery to make it of any use!

At that same period painless surgical operations were performed under the influence of animal magnetism; and if there is any honor in discovering an anæsthetic of little or no practical use, then surely Dr. Elliotson and Dr. Esdaile are as much entitled to it as Dr. Horace Wells. The gentlemen moving in this matter forget that it makes all the difference in the world whether a great scientific discovery is only conceived and sought for and feebly discerned, or abundantly demonstrated and made available for untold good to coming generations of men.

Some of the more ardent friends of Dr. Wells contend that he discovered the anæsthetic property of sulphuric ether, and thus shut off the claim of Jackson and Morton, founded on the superior powers of that substance. The statement finds but slender support in his own account of the matter. In the pamphlet put out by him in 1847, he says that a "surgical operation" was performed some two or three years before, on a person under the influence of ether. What the operation was, or what was the effect of the ether exactly, we are not told. Indeed, not a single circumstance connected with this transaction is mentioned, beyond the solitary fact that a Dr. Marcey was present. The experiment was far from being satisfactory, for he concluded thenceforth to abandon the use of ether and stick to nitrous oxide.

It seems that Wells was informed by Morton himself respecting the operations at the hospital in Boston; and what does he say in reply? Does he use the opportunity to set forth his own pretensions and insist upon the recognition of his rights, as he most assuredly would if he had done what his friends now claim for him? It is hardly conceivable that any qualm of modesty or delicacy of feeling would have then shut his mouth; and, in fact, on the spur of the moment he acted honestly and naturally. He says to Morton, "If the operation of administering the gas is not attended with too much trouble, and will produce the effect you state, it will undoubtedly be a fortune to you, provided it is rightly managed;" and that is about all he does say.

It is not strange that Hartford people, zealous for the honor and glory of their town, should be disposed to magnify the achievements of their townsman; but when men supposed to be unbiased by any consideration except the love of truth, and accustomed by the nature of their studies to sift and to weigh conflicting evidence, can find in the historical record of the rise, progress, and consummation of the discovery of the means of anæsthesia the slightest support of his claims, then, certainly, we wonder greatly and are perplexed.

JUSTICE.

OBITUARY.

IF we take a retrospective glance at the losses sustained in our profession, here and elsewhere, during the few months just passed, we find the names of several who were but yesterday the representatives of its intelligent, earnest, and hard-working laborers, mingled with those of others whose day of usefulness forms part of the history of a preceding generation. Among the latter we may particularly mention the name of P. C. A. LOUIS, the distinguished French physician and writer, who died in September last, at the advanced age of eighty-five. The Hôpital Charité, Hôtel-Dieu, and Hôpital Pitié were the fields in which his remarkable studies in diagnosis and pathology found fullest scope for their elaboration. It has been said of him that both in his public and private practice his skill in diagnosis was attested so often and so signally by pathological disclosure as to elevate the physician's art into something like the certainty of an exact science. As a writer, he is especially memorable for his re-

searches on Phthisis, on the Yellow Fever at Gibraltar, and on Typhoid Fever, more particularly as regards its differential diagnosis.

FREDERICK C. SKEY, whose death at the age of seventy-two was announced a few weeks since, was an able English surgeon and a popular lecturer. His early professional life was associated with that of the celebrated Abernethy, under whom he was Demonstrator of Anatomy at St. Bartholomew's Hospital. Difficulties which arose in this school upon the death of that surgeon led to the establishment of a formidable organization, embracing the familiar names of Pereira, Hope, R. B. Todd, Marshall Hall, Kiernan, and the subject of our notice, in the successful Aldersgate School of Medicine. Besides occupying other honorable public positions, he was Professor of Human Anatomy and Surgery, and afterwards President of the Royal College of Surgeons; and, in addition to treatises on venereal diseases, stone in the bladder, etc., he published an excellent work on Operative Surgery, which was reprinted in this country.

ALFRED POLAND, Surgeon to Guy's Hospital, also recently died, after a useful and honorable career as a lecturer and practitioner, in which he devoted much attention to ophthalmic surgery, as well as to the general domain of surgical art. He is better known to American readers from the publication of his prize essays on "The Nerves of the Orbit in the Mammalia and in Man," "Injuries and Wounds of the Abdomen," and "Gunshot Wounds and their Treatment;" he was also a contributor to "Guy's Hospital Reports," which he edited, and to Holmes's "System of Surgery."

Our local necrological record interests us even more profoundly. Of the older physicians who have quite recently passed away from their spheres of usefulness we may briefly refer to the names of Drs. Bell, Mason, and Wistar. Dr. JOHN BELL, who died in August, at the age of seventy-six, was a native of Ireland. He was at different periods a lecturer in the Philadelphia Medical Institute and the Medical College of Ohio; and his controversial candidacy for the position of Professor in the University of Pennsylvania, some twenty-five years since, will be remembered by many of the profession. He was a voluminous contributor to various medical journals, as well as the author of a number of works on "Baths and Mineral Waters," "Health and Beauty," "Physical and Moral Management of Infancy," "Regimen and Longevity," etc. He edited the lectures of Stokes on the "Practice of Physic," to which he made numerous and valuable additions; and the conjoint work was, probably on account of the amount of material thus contributed, familiarly known as "Bell and Stokes's Practice." He edited for a number of years, now nearly a third of a century since, the "Bulletin of Medical Science" and the "Eclectic Journal of Medicine," and published in connection with them a variety of excellent works, from the pens of distinguished authors of Great Britain especially.

Drs. JOHN KEMBLE MASON and MIFFLIN WISTAR, the latter the son of the celebrated Professor Caspar Wistar, were valued for their private and social virtues, for which they will be gratefully remembered, rather than for the more public appreciation which follows others in the arena of authorship or the lecture-room.

Dr. AUGUSTIN H. FISH, who died in August, was about forty years of age, a native of Trenton, New Jersey, and studied medicine in the office of Professor George B. Wood. He devoted himself assiduously to the labors of an arduous practice, with a zeal and energy that doubtless told with fatal effect on so slight a physical organization. As a medical practitioner he thoroughly enjoyed the confidence and devotion of his patients, to whom, as to the large circle of his friends, he was endeared by his remarkable integrity, manliness, sterling worth, and high professional morality. When in the vigor of health, he was one of the leading moving spirits of the Philadelphia County Medical Society, and also of the State Medical Society, of which he was for several years the treasurer. Few pass away whose blameless records leave behind so precious memories.

The more recent death of Dr. GEORGE PEPPER has been fully alluded to elsewhere. We may also briefly refer to the loss sustained by the Philadelphia College of Pharmacy in the decease of Professor EDWARD PARRISH, the author of a work on Practical Pharmacy, the popularity of which was attested by the fact that several editions of it were published. The circumstances of his death while acting as a Commissioner to the Indians are generally known. His eminent usefulness as an instructor and his excellent qualities as a man have been the theme of general admiration and appreciation.

BOOKS AND PAMPHLETS RECEIVED.

The Microscope and Microscopical Technology; a Textbook for Physicians and Students. By Dr. Heinrich Frey, Professor of Medicine in Zurich, Switzerland. Translated from the Fourth and Last German Edition, and edited, by George R. Cutter, M.D. 8vo, pp. 658. New York, William Wood & Co., 1872.

The Pathology, Diagnosis, and Treatment of the Diseases of Women, including the Diagnosis of Pregnancy. By Graily Hewitt, M.D. Lond., F.R.C.P., etc. etc. Second American, from the Third London Edition. 8vo, pp. 751. Philadelphia, Lindsay & Blakiston, 1872.

Proceedings of the Pathological Society of Philadelphia. Vol. III. 8vo, pp. 218. Collins, Printer, 1872.

Valedictory Address to the Graduating Class of Jefferson Medical College, at the Forty-seventh Annual Commencement, March 9, 1872. 8vo, pp. 23. Philadelphia, P. Madeira, 1872.

Transactions of the North Carolina State Medical Society for 1872.

GLEANINGS FROM OUR EXCHANGES.

EXCITABILITY OF THE MUSCLES IN CASES OF APPARENT DEATH (M. Rosenthal: *Wiener Med. Presse*, 1872, Nos. 18 and 19; quoted from a review by Bernhardt in the *Central-Blatt für Med. Wiss.*, xxxiii., 1872).—Rosenthal has found that the post-mortem electrical excitability disappears sooner after chronic diseases than after acute maladies, and that this excitability is retained longer in the well-nourished cadaver than in the emaciated. The duration of the excitability varies between one and a half and three hours. Immediately after death no changes in the excitability can be detected, but in the course of one or one and a half hours the direct excitability of the muscles of the face and extremities lessens in the centrifugal direction, while the indirect excitability has already decreased. At this point the temperature in the axilla stood at 35.2° C. Among the facial muscles only the orbicularis palpebrarum and levator alæ nasi et labii superioris reacted under the direct irritation, two hours after death.

By the aid of acupuncture the muscles acted at this trial. The same was true when a galvanic irritation was applied.

Although the muscles of the lower extremities may cease to react, two hours after death, it is possible to produce a powerful reaction in some of the muscles of the

arm, viz., in the abductor pollicis longus and in the extensor carpi ulnaris.

Two and a half hours post mortem, even the orbicularis palpebrarum, the abductor pollicis, and the flexor digitorum respond but tardily to the most powerful excitation, and after three hours even electro-puncture with faradic or very strong constant streams is unable to produce any contraction whatever. The temperature of the rectum at this time was still 32° C., and the joints showed no signs of rigidity.

On amputated limbs Bernhardt found that faradomuscular contractility ceased at the expiration of one and a half to two hours post mortem.

In the case of an hysterical woman who had apparently been dead forty-four hours, and was already prepared for her burial, and in whose case the author diagnosed only apparent death by the presence of excitability in all the muscles, we have an illustration that in cases of suspected "apparent death" our most trustworthy means of diagnosis lies in the condition of the excitability of the nerves and muscles.

Experiments upon animals agree fully with the facts already related in regard to man.

RABIES CANINA IN ANCIENT TIMES (K. F. H. Marx: *Wiener Mediz. Presse*, No. 34, 1872).—In the seventh volume of the Transactions of the Scientific Society of Göttingen, Marx has contributed an exhaustive treatise on "hydrophobia among the ancients," and deduces some practical conclusions for our guidance in modern times. Down to the present time none of the internal remedies have availed in hydrophobia, so that the only anchor of hope is external treatment. For this purpose the best application consists of caustic potash.

Much has been written on the subject of hydrophobia, but most of it is valueless. The author thinks it belongs to the province of psychical medicine. Centuries ago the question was raised, "Does the disease rank as a physical malady or an affection of the mind?" and that remains still the great question.

The chief point to be decided is, whether madness is a *necessary* consequence of the bite of a rabid dog, or only an accident of the morbidly excited imagination and confused reason, induced by the vulgar impression that madness must follow the bite, or by the anxiety of friends and the personal fear of death.

Children attacked by this disease, and unacquainted with the results of the injury, escape spasms and madness.

Furthermore, many adults bitten by a mad dog escape the disease altogether.

The author closes his exhaustive treatise with the following words:

"If we are able, as in olden times, and in the case of children, to instruct or induce men to be perfectly quiet after they are bitten by a rabid dog, not to tremble or be frightened, but to banish anxiety, to control their imagination, and with patience and hope to look forward to recovery, and also to persuade the well to remain with the unfortunate one and not to run away, but to cheer him in the hour of trial, then the means may have been discovered by which the effects of the accident are to be banished and the poison in the wound neutralized."

DR. G. M. HUMPHRY, of Cambridge, in a clinical lecture published in the *Lancet*, says, "Whether there is much pain or little, whether the patient sleeps or does not sleep, I refrain from giving opium or any other sedative. Pain, even severe and long continued, though hard to bear, does not seem to do the body much harm. I have often been surprised how little wear and damage it does,—not so much, I think, as the sedative which is given for its relief; and the exhaustion of a sleepless, restless night or period is usually followed by sleep, which is more likely to occur naturally at an early period if sedatives have not been used. Under ordinary circumstances, a restless night is less damaging than a night of sleep induced by a sedative. The patient commonly wakes from the latter paler, weaker, lower, more enervated, and less able to bear pain. I have long had this conviction; indeed, throughout life I have acted upon it. It may be regarded as a prejudice; but I think the patients recover better and quicker, and are less liable to pyæmia, erysipelas, and other unfavorable sequelæ of operations when thus treated. These, at any rate, we rarely see in Addenbrooke's Hospital; and our immunity from them is, I think, partly due to the practice of non-interference after operations so generally followed in this hospital. You will understand that I make a distinction between the use of opium as a remedy for disease and as a means of relieving pain after operations. In the former case it is a very valuable medicine under many circumstances,—one of the most valuable we possess. But in the latter case there is no disease; the pain is merely a natural consequence of the physical injury which has been sustained, or of the local changes which are taking place as a consequence of the injury. The condition will generally subside after a short time; and it is much better to allow it to do so, unless there is some special reason for interference."

AN INVASION OF WOOD-LICE (Rudolph Virchow: *Virchow's Archiv*, vol. 54, parts 1, 2, 1871).—Some time ago the medical faculty of Berlin received from the curate in Parstein, Prussia, a large number of small insects, with a request for an explanation of their nature. The curate stated, in an accompanying letter, that during repairs to an old hotel near the house of one of his parishioners, the home of the latter had been invaded by myriads of insects of an unknown nature.

They had filled every crevice and covered all the clothing and persons of the inmates of the house of the afflicted man, and had defied all attempts to extirpate them.

They had so annoyed the owner of the invaded house that his health had materially failed.

Dr. Gerstäcker, to whom Virchow had submitted the specimens, pronounced them to be small orthoptera, of the family of wood-lice known as psocina, and were indeed the Clothilla inquilina of Heyden. Gerstäcker further remarked that such an invasion of the dwellings of man by these insects had never been reported, and that they were closely allied to the well-known book- or paper-louse, the Troctes pulsatorius, L. (Gerstäcker und Carus, Zoologie, ii. S. 58).

The event reminds us strongly of the invasions of Leptus autumnalis, many of which are on record.

From the information contained in the letter which accompanied the insects, it was impossible to make out the nature of the bodily annoyance experienced by the unfortunate and tormented housekeeper: nevertheless, the case is worthy the attention of physicians.

COLD AFFUSION.—The first meeting of the Clinical Society of London (Oct. 11) was signalized by an exceedingly important discussion on the treatment of high temperature by cold affusion. Dr. Southey read an account of a case where a patient, the subject of rheumatism, became delirious with a moderately high temperature. Cold water was used, and the temperature reduced, whereupon the delirium abated and the patient got quiet sleep; but the temperature went up again, and the delirium returned. Again it was reduced with favorable results; but, though this was repeated frequently, the patient ultimately died quite worn out. In a case of Dr. Greenhow's, a somewhat similar history was recorded. In this, too, a fatal course was the result. The question accordingly arises, In what cases should

cold be used to reduce temperature? Dr. Wilson Fox, whose experience is great, distinctly lays down the rule that the cold-water bath should only be used when the bodily heat rises to a great height and itself threatens a fatal termination. This temperature he put at 106.5° or even 107° Fahr. The President, Sir W. Gull, mentioned a case in which the temperature was 107.5°, and in which two immersions cured the disease. In Dr. Southey's case there were bronchial complications, and there was an uneasy feeling that they were due to the cold. Dr. W. Fox, however, said that such complications happened quite as readily with high temperatures where no cold was used as with cold baths. There was an idea expressed that very large doses of quinine might be found to act as a substitute for cold water in reducing bodily heat.

THE HOT-SAND BATH.—A correspondent of the *Medical Times and Gazette* says, "Fresh from the enjoyment of a delicious therapeutical novelty, and being, as I believe, the *corpus vile* on whom the first experiment has been made in London, I beg to call the attention of my professional brethren to the hot-sand bath which has been established by Dr. Conradi at 22, Aberdeen-place, Maida-hill.

"The patient is introduced into a warm, comfortable room, in which is a bath, fenced round with curtains, filled with sand heated to about 100° to 120°. In this a longitudinal groove (I will not say grave) is scooped to receive the patient, who is wrapped in a sheet, and so protected from contact with the sand. There is a comfortable pillow for the head.

"Then the bath operator gradually covers up feet, legs, arms, and trunk with the warm sand. A bucket of hotter and one of cooler sand are at hand, so that the temperature can be adjusted with the greatest nicety. The feeling of warmth is very agreeable, and the weight of the sand is just enough to cause a pleasant sense of compression and support. After an hour's delightful repose, the patient rises, is refreshed by a sluicing with hot water, and goes away refreshed.

"The effect is very different from that of hot water, and still more from that of hot air or steam. There was absolutely no commotion of the heart, nor any of the grilling effect on the windpipe which I have experienced in Turkish baths. Altogether, it seems a good thing when we want to produce measured perspiration and relieve congestion of the internal organs."

ETHER VERSUS CHLOROFORM.—We find the following in the *Clinic* (Chicago) of November 2, quoted from the *British Medical Journal* of October 12: "If the force of statistics be of any value, ether, beyond question, is the agent which presents the most powerful claims and must obtain our confidence as the safest anæsthetic. The reports at the Medical Society of Virginia during this session are conclusive: by combining American and British statistics, the result is found to be as follows:

Agent employed.	Deaths.	Inhalations.
Ether	4 to	92,815, or 1 in 23,204
Chloroform . . .	53 to	152,260, or 1 in 2,873
Mixture of Chloroform and Ether	2 to	11,176, or 1 in 5,588
Bichloride of Methylene .	2 to	10,000, or 1 in 5,000

"It is thus proved statistically that chloroform is eight times as dangerous as ether, twice as dangerous as a mixture of chloroform and ether, and, as far as experience goes, it is more dangerous than bichloride of methylene; in fact, chloroform is the most dangerous of all the anæsthetic agents in use. If statistics are of any value, these should be startling and impressive ones. The report of the London Chloroform Committee states the result of careful investigation, that 'ether is less dangerous than chloroform;' and that 'with every care and the most exact dilution of the chloroform vapor, the state of insensibility may pass in a few moments into one of imminent death;' and the latest surgical work from America advocates ether as the most suitable anæsthetic."

REMOVAL OF A STONE FROM THE KIDNEY—DEATH.—Dr. Dawson presented to the Academy of Medicine in Chicago, October 26, a phosphatic renal calculus seven-eighths of an inch in length, half an inch in breadth, and weighing 20¾ grains, removed by him from the left kidney of a woman fifty years of age. An abscess had formed, and was three times exhausted of pus by the aspirator, within the five days preceding the operation. This was done under chloroform, an incision being made along the edge of the erector spinæ muscle, from the eleventh rib to the crest of the ilium, and a dissection made to the depth of 2¾ inches, when the cavity of a sac, composed of the degenerated kidney substance, was entered. After the extraction of the stone, a drainage-tube was inserted, and the wound closed.

For four days the patient did well; pyæmia then set in, and death ensued in less than twenty-four hours.

RUPTURE OF THE UTERUS; SUCCESSFUL GASTROTOMY.—In the *Medical Times and Gazette* of September 21 a case is quoted from the *Bulletin de Thérapeutique* in which, December 18, 1871, four days after rupture of the uterus with escape of the fœtus and annexes into the abdominal cavity, gastrotomy was performed by Dr. Fourrier, of Compiègne. "The left iliac fossa was found to be lined with a blackish membrane in shreds, which was afterwards determined to be the peritoneum in a state of gangrene." No hemorrhage ensued; the case went on well, with some fluctuations, for about four weeks, when enteritis, and what was at first feared to be purulent infection, set in. Quinine was given in large doses with good effect. By February 19, 1872, the patient was considered quite well, and in May the menses reappeared.

The woman was seven or eight months gone in her pregnancy when the rupture occurred.

A WRITER in the *Australian Medical Gazette* advocates the inhalation of chloroform by pouring about thirty drops of the article on a handkerchief, breathing it in for a few seconds gently, and then as forcibly as possible.

He thinks this method perfectly safe,—which remains to be proved, as he adduces only four cases, though he claims to have had others in which it had been used by him. [It seems to us much like Simpson's plan of pouring the chloroform, drop by drop, on a single layer of thin stuff placed over the mouth; and a friend assures us that he has seen death occur when this was used.—ED. P. M. T.]

MISCELLANY.

A CORRESPONDENT sends us the following:

"'NOSE MACHINE.—This is a contrivance which, applied to the nose for an hour daily, so directs the soft cartilage of which the member consists, that an ill-formed nose is quickly shaped to perfection. Any one can use them, and without pain. Price 10s 6d, sent carriage free.—ALEX. ROSS, 248 High Holborn, London. Pamphlet sent for two stamps.'

"The above advertisement appears in the London *Spectator* of a recent date. We hasten to give it circulation. We know of people whose noses have been to

them sources of life-long torment,—noses retroussé to such a degree that to follow them, as the wayside proverb directs, were spiritually wise; pug-noses deftly buttoned into a breadth of face,—noses of innominable form, flabby, and elusive of the handkerchief; Thackerayan noses, more amazing for what they lack than for what they have,—making the profile like that of the faces we used to bite out of gingerbread when we were boys; and, lastly, the noble Eastern nose, a tower of sadness to him whom, having wandered from his fathers' ways, the signs of race discomfort. Good news to one and all, or to such, at least, as begin early to train their noses in the way they should go, and whose cartilages are of a submissive gelatine. For the first time we are led to reflect as to how much of nose-character is bone, and how much is jelly (fair subject for a prize essay); for, as all great generals have had great noses, there may be, too, a nose in its intimate essence professorial, which, obtainable by aid of art, may bring a man to this crown of medical glory ere yet his beard be gray.

"Also, in the *Guardian*, a well-known high-church paper, we find a gentleman who advertises for second-hand sets of artificial teeth. What does he do with them?"

Suicides in France in 1870 (*Medical Times and Gazette*, August 31, 1872).—The French *Journal Officiel* has recently published the "Report of the Administration of Criminal Justice in France for the Year 1870." The following are the passages that relate to suicides:

"During 1870 there have been brought under the notice of the Administration 4157 completed suicides; 3371 (81 per cent.) occurring in men, and 786 (19 per cent.) in women. The ages of 10 individuals are unknown; 18 were less than 16 years old; 130 between 16 and 20; 1067 between 21 and 40; 1669 between 40 and 60; and 1243 were 60 and upwards. As to their civil status, 1447 were unmarried; 1380 married, with children; 599 married, without children; 464 widowed with, and 199 widowed without, children. There were 2630 inhabitants of rural districts, to 1461 inhabitants of towns, the domicile of 66 being unknown. With respect to their occupations, 1848 belonged to agricultural, 933 to the various forms of industry, 119 were merchants or shopkeepers, 716 were of the liberal professions, 116 were servants, and 395 without avowed occupations. Of the 4157 suicides, 1384 took place during spring, 1129 in summer, 668 in autumn, and 976 in winter. As in former years, hanging and drowning have been the most frequent means of death resorted to. The presumed motives were misery and reverses in fortune in 383, family discords in 512, love, jealousy, debauchery or other misconduct in 701, various forms of suffering in 930 (these being physical in 515), and cerebral disease in 1377. In 22 instances suicide was committed by the authors of capital crimes, and in 232 the probable motive could not be assigned."

It is not yet many years since (1838) it was said that arsenic was a normal constituent of the human body, existing especially in the bones. This was as far as possible disproved by Flandin. Doubtless the arsenic, if any existed, was in the reagents employed by Orfila, who made the so-called discovery. Even now it is by no means certain whether arsenic does not exist naturally in many soils. Dr. Taylor says he has extracted an unmistakable quantity of arsenic from earth taken from churchyards in the North of England. Such statements necessitate the utmost care in removing bodies from the ground and in putting up the parts intended for analysis. An interesting case is narrated of a gentleman who, after removing a stomach for analysis, being called away in haste, wrapped it in a piece of wall-paper, the clean side next the organ. On analysis, both morphia and arsenic were found in the stomach, the origin of the last not being apparent until the paper was more carefully examined, when it was discovered to be colored with arsenic. The history of the case contradicted the use of arsenic in it: had it not, a false charge of arsenical poisoning might have been brought.

Superstition.—The Paris correspondent of a daily paper says,—

"Another swindling operation is also to be put down by the police,—to wit, the sale of magic plants by the herbalists. It will be scarcely credited that in Paris, in the nineteenth century, there is an immense consumption made of these sorts of herbs, of which very small portions are sold at fabulous prices. Thus, a piece of mandrake, gathered when the moon is full, costs at least fifty francs. A single leaf of azedarach, upon which, on the last Saturday of the month, has been pronounced the grand cabalistic formula of King Solomon, finds easily a purchaser at one hundred francs; while a bundle of moss which a centenarian has stewed up in a saucepan with two frogs and the skull of a man who has committed suicide, is looked upon as a bargain at two hundred. It is almost superfluous to add that moss, mandrake, and azedarach are nothing but common weeds, bought for a few centimes in the morning at the herb-market of the Rue de la Poterie, and raised by credulity and ignorance to the dignity of magic plants."

Importance of Clean Bottles.—A case of poisoning is reported in the *British Medical Journal*, under the following circumstances: A child, two weeks old, was ordered dill-water, which was procured in a bottle previously containing a preparation of opium and bearing a label to that effect. The bottle was empty, what liquid there had been in it having dried up, leaving a deposit on the sides and bottom. The dill-water dissolved the residue, and, upon analysis, was found to contain morphia and meconic acid. A teaspoonful was given to the infant, who immediately thereafter fell asleep. His breathing changed within an hour, followed by convulsions and narcotism. He died the following day.

Pharmacy at Sea.—The *Chemist and Druggist* contains a story of a sea-captain to whom a sailor applied

for relief for "something on his stomach." The captain consulted his book of directions, and prescribed "No. 15." Unfortunately, however, there had been a run on No. 15, and the bottle was empty. But the skipper, remembering old games of cribbage, made up a dose by combining No. 8 and No. 7, saying "8 and 7 make 15;" and the sailor, to whom the calculation seemed quite natural, took the mixture with startling effect.

TOO MUCH MEDICINE.—The New Bedford (Mass.) *Mercury* says the medicine-chest of one of the abandoned Arctic whalers was broken open by some of the natives, who, thinking they had found a prize, proceeded to swallow the contents of all the bottles. The survivors described the result as startling; for the doses were too large for the constitution of even an Esquimaux. Several of the partakers died, and others wanted to, but couldn't.

THE OBSTETRICAL SOCIETY OF LONDON has appointed a committee to form a collection of pelves, illustrative of various points in connection with obstetrics. The Hon. Secretaries to the Pelvis Committee state that they will be willing, if desired, to make arrangements as to expense of carriage, casts, models, drawings, photographs, etc., with any society or gentleman in this country who may wish to contribute specimens. Their address is at the Society's Library, 29 Regent Street, W.

. THE *Leavenworth Medical Herald* of October 1 says, "We have before us a curiosity in the shape of a medical work, published in 1759, consisting of a 'Collection of the Yearly Bills of Mortality in London, from 1657 to 1758, inclusive.' From among the causes of death we select the following: Headmouldshot, Horseshoehead, Twisting of the Guts, Rising of the Lights, Stoppage in the Stomach, Livergrown, Strongullion."

A RETURN completed for the year 1870 shows no less than 330 coroners in England and Wales,—233 for districts in counties, and 97 for boroughs. The great majority of them are elected by the freeholders or town councils; but in some cases by charter or prescription the appointment is made by the lord of the manor. It would be interesting to have officially the relative number of medical and legal coroners.

THE returns of the mortality for 1870, just published, show that during that year the deaths of 18 males and 63 females whose ages were stated to be upwards of 100 years were registered,—in all 81 persons, against 63 and 79 respectively in 1869. The highest ages said to have been attained in 1870 were—108 by a male who died at Stone, in Staffordshire, and 107 by a female who died at Huddersfield.

BRAVERY OF A MEDICAL OFFICER.—In General Orders No. 99, from the Headquarters of the U. S. Army at Washington, reporting an engagement with hostile Indians on the 29th of September last, by an expedition under command of Colonel R. S. McKenzie, of the 4th Cavalry, "Acting Assistant-Surgeon Rufus Choate is commended for his care of the wounded under fire."

M. LEGRANDE DU SAULLE, physician at the Bicêtre and the Depôt of the Prefecture of Paris, says the number of lunatics brought to the Depôt in the summer of 1871 was much below the average. A writer in the *Gazette Médicale* explains this by saying that during the Commune people could hardly diagnosticate a lunatic from a "Red;" and after the collapse of the revolution the Chassepot proved a most effective, though a deplorable, remedy.

A SERIOUS JOKE.—A typographical error makes a contemporary credit Dr. G. M. Beard, of New York, with the writing of a pamphlet on the "*Comic* Law of Intemperance."

MR. ARTHUR E. DURHAM will succeed the late Mr. Poland as Surgeon to Guy's Hospital.

MORTALITY OF PHILADELPHIA.—The interments reported at the Health Office for the week ending Nov. 23, 1872, were 244; 146 adults, and 98 minors. 15 were of bodies brought from the country; making the mortality of the city 229. Among the causes of death were:

Consumption of the Lungs	34
Other Diseases of the Respiratory Organs	31
Diseases of the Circulatory Apparatus	11
Diseases of the Brain and Nervous System	40
Diseases of the Digestive Apparatus	20
Zymotic Diseases (1 from Smallpox)	14
Typhoid Fever	5
Casualties	5
Intemperance	2
Murder	1
Suicide	1
Debility (including "Inanition" and "Marasmus")	18
Still-born	24
Old Age	10

(The interments reported for the week ending Nov. 25, 1871, were 394.)

THE meteorological record kept at the Pennsylvania Hospital was as follows:

	THERMOMETER. Max.	Min.	BAROMETER. (2 P.M.)
Nov. 17	37.0°	25.0°	30.63 in.
" 18	44.0	32.0	30.38 in.
" 19	41.0	30.5	30.21 in.
" 20	41.0	30.0	30.14 in.
" 21	27.0	24.5	30.42 in.
" 22	36.0	32.0	30.08 in. (Rain.)
" 23	43.0	34.0	30.33 in.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U. S. ARMY, FROM NOVEMBER 12, 1872, TO NOVEMBER 18, 1872, INCLUSIVE.

MCKEE, J. C., SURGEON.—Granted leave of absence for fifteen days. S. O. 220, Department of the East, November 13, 1872.

FORWOOD, W. H., ASSISTANT-SURGEON.—Assigned to duty as Post Surgeon at Fort Richardson, Texas. S. O. 200, Department of Texas, November 7, 1872.